REMARKS

Reconsideration of this application is respectfully requested in view of the previous RESPONSE and the foregoing remarks.

Claims 1, 5, 12, 14, 16 and 18 (i.e. all of the independent claims) have been amended to recite that the stress relaxation ratio is 10% or less. Support for these amendments may be found in the present specification at page 22, line 15 to page 23, line 1, especially at page 22, lines 22-24, as well as in the test results for Sample Nos. 1-7 in Table 2 on page 25.

The courtesy extended to applicants' representatives by the Examiner during the Interview on June 19, 2002, is most appreciated.

In the June 19th Interview, certain comparative data were discussed. Enclosed herewith is a Rule 132 Declaration, signed by Mr. Eguchi, including such data. The data in the enclosed Rule 132 Declaration are modified somewhat from the data discussed in the Interview, insofar as the Rule 132 Declaration includes the newest results obtained.

For reasons given in the previous RESPONSE, as supplemented by the enclosed Rule 132 Declaration, the present claims are believed to be novel and nonobvious over the prior art of record. The recitation inserted herein, that the stress relaxation ratio is 10% or less, is regarded to be a particularly distinguishing feature.

An Information Disclosure Statement is being filed concurrently herewith.

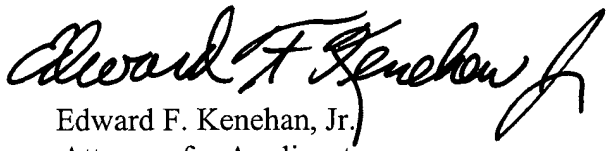
Allowance is requested.

In the event that this paper is not timely filed, Applicant respectfully petitions for an appropriate extension of time. The fees for such an extension or any other fees which may be due

with respect to this paper, may be charged to Deposit Account No. 01-2340.

Respectfully submitted,

ARMSTRONG, WESTERMAN, HATTORI, LLP



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Attachments: Version with markings to show changes made
Rule 132 Declaration, signed by Mr. Eguchi
H:\HOME\jli\EdwardKenehan\02\020960.amd.frm

VERSION WITH MARKINGS TO SHOW CHANGES MADE

In the claims:

Please amend claims 1, 5, 12, 14, 16 and 18 as follows:

1. (Twice Amended) A high-mechanical strength copper alloy, consisting essentially of 3.5 to 4.5% by mass of Ni, 0.7 to 1.0% by mass of Si, 0.01 to 0.20% by mass of Mg, 0.05 to 1.5% by mass of Sn, 0.2 to 1.5% by mass of Zn, and less than 0.005% by mass (including 0% by mass) of S, with the balance being made of Cu and inevitable impurities,

wherein a diameter of a crystal grain in the alloy is from more than 0.001 mm to 0.025 mm; and the ratio (a/b), between a longer diameter a of a crystal grain on a cross section parallel to a direction of final plastic working, and a longer diameter b of a crystal grain on a cross section perpendicular to the direction of final plastic working, is 1.5 or less, [and]

wherein the alloy has a tensile strength of 800 N/mm^2 or more, and

wherein the alloy has a stress relaxation ratio of 10% or less.

5. (Twice Amended) A high-mechanical strength copper alloy, consisting essentially of 3.5 to 4.5% by mass of Ni, 0.7 to 1.0% by mass of Si, 0.01 to 0.20% by mass of Mg, 0.05 to 1.5% by mass of Sn, 0.2 to 1.5% by mass of Zn, and further 0.005 to 2.0% by mass in the sum total of at least one element selected from the group consisting of 0.005 to 0.3% by mass of Ag, 0.005 to 2.0% by mass of Co and 0.005 to 0.2% by mass of Cr, and less than 0.005% by mass (including 0% by mass) of S, with the balance being made of Cu and inevitable impurities,

wherein a diameter of a crystal grain in the alloy is from more than 0.001 mm to 0.025 mm; and the ratio (a/b), between a longer diameter a of a crystal grain on a cross section parallel to a direction of final plastic working, and a longer diameter b of a crystal grain on a cross section perpendicular to the direction of final plastic working, is 1.5 or less, [and]

wherein the alloy has a tensile strength of 800 N/mm or more, and

wherein the alloy has a stress relaxation ratio of 10% or less.

12. (Amended) A high-mechanical strength copper alloy, consisting essentially of 3.5 to 4.5% by mass of Ni, 0.7 to 1.0% by mass of Si, 0.01 to 0.20% by mass of Mg, 0.05 to 1.5% by mass of Sn, 0.2 to 1.5% by mass of Zn, and less than 0.005% by mass (including 0% by mass) of S, with the balance being made of Cu and inevitable impurities,

wherein a diameter of a crystal grain in the alloy is from more than 0.001 mm to 0.025 mm; and the ratio (a/b), between a longer diameter a of a crystal grain on a cross section parallel to a direction of final plastic working, and a longer diameter b of a crystal grain on a cross section perpendicular to the direction of final plastic working, is 1.5 or less.

wherein the alloy has a tensile strength of 800 N/mm^2 or more, [and]

wherein the alloy does not contain carbon, and

wherein the alloy has a stress relaxation ratio of 10% or less.

14. (Amended) A high-mechanical strength copper alloy, consisting essentially of 3.5 to 4.5% by mass of Ni, 0.7 to 1.0% by mass of Si, 0.01 to 0.20% by mass of Mg, 0.05 to 1.5% by mass

of Sn, 0.2 to 1.5% by mass of Zn, and less than 0.005% by mass (including 0% by mass) of S, with the balance being made of Cu and inevitable impurities,

wherein a diameter of a crystal grain in the alloy is from more than 0.001 mm to 0.025 mm; and the ratio (a/b), between a longer diameter a of a crystal grain on a cross section parallel to a direction of final plastic working, and a longer diameter b of a crystal grain on a cross section perpendicular to the direction of final plastic working, is 1.5 or less,

wherein the alloy has a tensile strength of 800 N/mm^2 or more, [and]

wherein the alloy does not contain carbon and molybdenum, and

wherein the alloy has a stress relaxation ratio of 10% or less.

16. (Amended) A high-mechanical strength copper alloy, consisting essentially of 3.5 to 4.5% by mass of Ni, 0.7 to 1.0% by mass of Si, 0.01 to 0.20% by mass of Mg, 0.05 to 1.5% by mass of Sn, 0.2 to 1.5% by mass of Zn, and further 0.005 to 2.0% by mass in the sum total of at least one element selected from the group consisting of 0.005 to 0.3% by mass of Ag, 0.005 to 2.0% by mass of Co and 0.005 to 0.2% by mass of Cr, and less than 0.005% by mass (including 0% by mass) of S, with the balance being made of Cu and inevitable impurities,

wherein a diameter of a crystal grain in the alloy is from more than 0.001 mm to 0.025 mm; and the ratio (a/b), between a longer diameter a of a crystal grain on a cross section parallel to a direction of final plastic working, and a longer diameter b of a crystal grain on a cross section perpendicular to the direction of final plastic working, is or less 1.5,

wherein the alloy has a tensile strength of 800 N/mm^2 or more, [and]

wherein the alloy does not contain carbon, and

wherein the alloy has a stress relaxation ratio of 10% or less.

18. (Amended) A high-mechanical strength copper alloy, consisting essentially of 3.5 to 4.5% by mass of Ni, 0.7 to 1.0% by mass of Si, 0.01 to 0.20% by mass of Mg, 0.05 to 1.5% by mass of Sn, 0.2 to 1.5% by mass of Zn, and further 0.005 to 2.0% by mass in the sum total of at least one element selected from the group consisting of 0.005 to 0.3% by mass of Ag, 0.005 to 2.0% by mass of Co and 0.005 to 0.2% by mass of Cr, and less than 0.005% by mass (including 0% by mass) of S, with the balance being made of Cu and inevitable impurities,

wherein a diameter of a crystal grain in the alloy is from more than 0.001 mm to 0.025 m; and the ratio (a/b), between a longer diameter a of a crystal grain on a cross section parallel to a direction of final plastic working, and a longer diameter b of a crystal grain on a cross section perpendicular to the direction of final plastic working, is or less 1.5,

wherein the alloy has a tensile strength of 800 N/mm or more, [and]

wherein the alloy does not contain carbon and molybdenum, and

wherein the alloy has a stress relaxation ratio of 10% or less.